

Quanta Resources Superfund Site Update



Health and Safety at the Site

March 2018

The EPA is aware of, and is actively addressing, public concerns at the Quanta Superfund cleanup in Edgewater, NJ. We understand that neighboring residents are sensitive to the impact of the clean-up and are concerned about odors and potential health effects. While EPA understands the sensitivity, the presence of odor and short term exceedances of the project screening level for volatile organic compounds does not necessarily mean there is an effect on people's health.

EPA has been working with Honeywell to employ several odor and vapor control methods through-out the duration of the project. Recently, it has become clear that these efforts have not produced the desired result. Therefore, Honeywell has scaled back operations significantly and will work in smaller areas, giving less opportunity for vapor emissions from contaminated soil and debris.



To date, approximately 40% of the project has been completed.

Background on the Cleanup

The Quanta property was the home of a roofing tar plant for more than 100 years. Roofing tar was produced from coal tar, a dark-colored viscous liquid which has a distinct odor similar to asphalt or mothballs. The cleanup remedy at the Quanta site includes mixing cement into contaminated soil (a process called solidification) to permanently lock up heavy metals, coal tar, and waste oils so these contaminants cannot move. Odors are likely to occur when soil containing coal tar is uncovered or excavated. Residual odors can also linger after construction workers have left the site.

Understanding Potential Public Health Impacts

EPA has set a screening level for naphthalene of 4.62 ug/m³ (micrograms per cubic meter) that is a very conservative value used to protect people's health near the site when applied over the entire 18-month duration of the project. This conservative level, based on a one in a million excess cancer risk, gives EPA the ability to make needed adjustments in the on-site work. The 4.62 ug/m³ is not a "not to exceed" value. Short-term exceedances are not unexpected and do not pose an immediate risk to people's health.

The daily average (10 hours/day, work days) for naphthalene through the first 276 work days at the Quanta Superfund site is 44 ug/m³ (micrograms per cubic meter). The work is approximately 40% complete. This average is being measured right at the fence line, not where people commonly work, live or shop. Because vapors dissipate quickly as one moves farther from the source of the vapors, the 44 ug/m³ average daily level is not representative of exposure levels further away from the fence line, such as occupied areas of the neighboring properties. The air monitoring is being expanded further away from the fence line to better measure concentrations on a 24-hour/seven-day a week basis, where people are located.

Additionally, because the average is trending above the 4.62 ug/m³ screening level, the EPA has required that Honeywell take a number of actions to reduce the release of naphthalene while doing work.

Regarding levels of naphthalene where there would be adverse health effects, 50,000 ug/m³ is the Permissible Exposure Limit for naphthalene set by the Occupational Safety and Health Administration (OSHA). This is the concentration to which most workers can be exposed without adverse health effects averaged over a normal eight-hour workday or a 40-hour workweek. It is also used to determine whether workers performing cleanup at the site need to wear protective equipment, such as respirators.

Recent Measures to Address Odors & Protect Human Health: *While exceedance levels and action thresholds have been conservatively established to allow EPA and Honeywell to manage the site in a way that maximizes protectiveness of human health and the environment, EPA understands the sensitivities surrounding the Quanta site and continues to work with Honeywell to address the nuisance elements while guarding against public health impacts. In recent weeks, as a result of the most recent concerns, the following actions were taken:*

- **Increased the amount of Portland cement being added to the Posi-shell mix:** Honeywell has been applying a coating (Posi-shell) on disturbed areas. The Posi-shell is a blend of clay binders that forms a thin layer similar to stucco over the soils. Increasing the amount of cement in the Posi-shell mix will help the Posi-shell set up faster, with the intent of increasing the effectiveness of the spray. Where Posi-shell cannot be applied, polyethylene sheeting is used to cover exposed surfaces.
- **Added 2,000 more linear feet of misters:** Mist generators installed along the fence line of the site are designed to help neutralize volatile organic compounds coming from the site.
- **Covered disturbed areas with plastic poly sheeting before leaving the site.**
- **Reduced the area of disturbed soil and better management of debris:** Honeywell has reduced the size of areas that are being excavated and is also limiting the movement of stockpiled materials. These measures will reduce the opportunity for vapor emissions from contaminated soil and debris.
- **Expanded monitoring stations** to improve awareness of potential volatile organic compound migration to residential and retail shopping areas.

Air Monitoring: Multiple real-time fixed and mobile air monitors are positioned on the perimeter of the Quanta site (and recently enhanced monitoring where people live) to measure dust and total volatile organic compounds in the air. These results are posted on www.quantaremediation.com within about one business day. Air samples are also collected for off-site laboratory analysis of the 17 volatile and semi-volatile compounds present in the soil at the site. The results of the laboratory analyzed samples are also posted on the website within about one week.

Increased Air Sampling: The air sampling data that has been posted on the Quanta remediation website reflect air concentrations on the perimeter of the site during active work hours. Concentrations are expected to be lower on weeknights and weekends when no active work is taking place. Because vapors dissipate quickly from the source of the vapors, concentrations are also expected to be lower further away from the fence line, such as at nearby residential properties. EPA has directed Honeywell to begin collecting 24-hour samples to gain a better understanding of the entire picture of air quality in the surrounding community.

Samples will be collected at nearby residential and retail properties in the area. Results are posted to the Quanta remediation website at www.quantaremediation.com as they become available.



Worker applying Posi-shell.

For More Information, Contact:

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Call Quanta hotline at: 201-807-0991

Visit EPA's website:

www.epa.gov/superfund/quanta-resources

For project updates, schedule, and air monitoring data from Honeywell, visit:

www.quantaremediation.com

Advancing Our Mission: EPA stands ready to continue its efforts to protect public health and the environment by cleaning up the Quanta site. As we do this, we remain vigilant to ensure our mitigation efforts are done in a way that is mindful of the cleanup efforts on our neighbors who live and work in the immediate vicinity. With that said, EPA is doing all it can to ensure that monitoring and best practices are occurring at the site. We welcome public feedback on our efforts and any identified concerns from the surrounding community.

New Hotline: EPA and Honeywell have established a hotline that people can call 24 hours a day, seven days a week. During hours when work is being conducted at the site complaints and concerns will be relayed to a supervisor at the site and to EPA. **The hotline number is 201-807-0991.**